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JUL 13 1994
DEPT. OF ECOLOGY

RAINIER GOLF AND COUNTRY CLUB
1856 SOUTH 112TH STREET
SEATTLE, WASHINGTON 98168

UST CLOSURE REPORT

Prepared by:
O'Sullivan Omega, Inc.
3214 16th Avenue South West
Seattle, Washington 98134
Contractors # OSULLPEO99PW
Tank Service Provider License # S000036

Prepared for:
Mr. Ron Proctor
Rainier Golf and Country Club
1856 South 112th Street
Seattle, Washington 98168

May 16, 1994

Operations Project # 2193-081
Environmental Project # 2634-008

SR
7/28/94
du

DEPARTMENT OF ECOLOGY NWRO/TCP TANKS UNIT	
INTERIM CLEANUP REPORT	<input type="checkbox"/>
SITE CHARACTERIZATION	<input checked="" type="checkbox"/>
FINAL CLEANUP REPORT	<input checked="" type="checkbox"/>
OTHER _____	<input type="checkbox"/>
AFFECTED MEDIA: SOIL	<input checked="" type="checkbox"/>
OTHER _____ GW	<input checked="" type="checkbox"/>
INSPECTOR (INIT.) <u> </u> DATE <u>8-4-94</u>	<input type="checkbox"/>



O'Sullivan Omega

May 16, 1994

Mr. Ron Proctor
Rainier Golf and Country Club
1856 South 112th Street
Seattle, Washington 98168

**RE: Underground Storage Tank Closure Report
 Rainier Golf and Country Club**

Dear Mr. Proctor:

This letter report presents O'Sullivan Omega's findings regarding the removal of two (2) 300 gallon gasoline underground storage tanks (USTs), and one (1) 110 gallon diesel UST at the Rainier Golf and Country Club located in Seattle, Washington (Figure 1). The USTs were decommissioned and removed under the supervision of O'Sullivan Omega, Inc. (O'Sullivan) of Seattle, Washington. In addition, O'Sullivan performed the UST Site Assessment for the project following Washington State Department of Ecology's (Ecology) document *Guidelines for Site Checks and Site Assessments for USTs* (Revised, October 1992).

The objectives of this project were to:

- Decommission and remove three USTs;
- Determine concentrations of total petroleum hydrocarbons (TPH) in soil samples collected adjacent to/and underlying the UST and from any associated soil stockpiles;
- Compare concentrations of TPH detected in soil to the applicable Washington State Model Toxics Control Act (MTCA) Method A Soil Cleanup Guidelines (WAC 173-340); and
- Prepare a final report (following Ecology's Guidance for Site Checks and Site Assessment for USTs) which documents the tank removal activities, field observations, soil sampling locations, analytical results, and conclusions.

LETTER REPORT ORGANIZATION

This letter report begins with a brief description of the Site Location and History, followed by a discussion of UST Decommissioning and Removal Activities (tank inerting, product and tank disposal, etc.), and description of the USTs. Subsequent sections present the elements of O'Sullivan Omega's Soil Sampling, Laboratory Analysis, Findings, and project Conclusions/Recommendations. Figures, Tables and supporting technical appendices follow the main text.

SITE LOCATION AND HISTORY

The Rainier Golf and Country Club is located at 1856 South 112th Street in Seattle, Washington. The USTs were located at the golf course maintenance facility, which is located approximately in the middle of the golf course. The Golf Course is surrounded by residential areas. The USTs were installed approximately seven years ago and were utilized to fuel grounds maintenance equipment (Proctor, personnel communication, 1994). The UST locations relative to site features are displayed on Figure 2.

TANK DECOMMISSIONING & REMOVAL OPERATIONS

Copies of UST decommissioning and removal permits and the Temporary/Permanent Closure and Site Assessment Notice and UST Site Assessment Checklist are provided in Appendix A. In addition, copies of UST cleaning and disposal certificates are included in Appendix B.

The tanks removed from the site included:

- One (1) 110 gallon diesel (UST #1);
- One (1) 300 gallon gasoline (UST #2); and,
- One (1) 300 gallon gasoline (UST #3);

The 30 day intent to Close notification was submitted to Ecology by O'Sullivan Omega on March 10, 1994. The USTs were triple rinsed and cleaned by Coastal Tank Cleaning (Coastal) of Seattle, Washington. All product and rinsate were disposed of by Coastal in accordance with all applicable local, state, and federal regulations. The tanks were exposed and removed on April 15, 1994, and transported to Seattle Iron and Metal for destruction.

Petroleum contaminated soils were excavated after the USTs were removed. Approximately one cubic foot of diesel contaminated soil was removed from the diesel UST location (UST #1). Approximately 10 cubic yards of impacted soil was removed from the UST #2 location. The area was over-excavated to remove all visibly impacted soils.

The UST # 3 area was over excavated until all instrumentally detectable impacted soils were removed. Approximately 20 to 30 cubic yards of suspect contaminated soils were removed from the UST #3 excavation. All suspected petroleum contaminated soils were stockpiled on plastic sheeting near each of the excavations. All stockpiles were securely covered with plastic sheeting to prevent run on/run off.

UST DESCRIPTIONS

UST #1 was located east of the main maintenance facility equipment shed (Figure 2). The UST was located approximately 0.5 feet below ground surface (BGS), and was covered with crushed gravel fill. The tank bottom was rusted, however the sides and top appeared to be in good shape. No holes were observed in UST #1.

UST #2 was located at the southeast corner of the equipment shed and was buried approximately 1 foot BGS. The UST was overlain by crushed gravel backfill. The UST had a rudimentary spill protection collar consisting of concrete blocks surrounding the fill pipe. The tank displayed a light rust coating, with no apparent holes or pitting.

UST # 3 was buried approximately 2 feet BGS and was overlain by crushed gravel. The tank displayed a light rust coating and was covered with a petroleum hydrocarbon sheen on it's northern side. There were no apparent holes or pitting evident on this UST.

SOIL SAMPLING

The soils encountered were generally dry to moist, hard, orange brown, medium sandy, pebble to boulder gravel. The clasts were sub-rounded to rounded, and ranged in size from pebbles to large boulders. The undisturbed formation displayed crude bedding, and is most likely a glacial outwash deposit. The UST cavities had been backfilled with the native material, and overlain with crushed gravel.

Samples were collected from the floors, sidewalls and soil stockpiles of all three excavations. The samples from UST #1 and UST #2 were collected and placed directly into laboratory prepared jars by using a stainless steel spoon. The samples from UST #3 were collected from the center of material extracted with the trackhoe bucket, and placed directly into jars. Split samples were placed into zip lock baggys for field screening of volatile organic compounds commonly found in petroleum products. All samples were uniquely labeled to the site and UST, and immediately placed into a chilled cooler. All samples were tracked under the laboratory chain-of-custody procedures.

UST # 1

Three samples were collected from the UST excavation. Sample T1-2 was collected at a depth of 2 feet from the cavity floor. Sample T1-3 was collected as a composite from all four sidewalls.

Sample T1-1 was collected from the stockpile.

UST # 2

Four samples were collected from the UST # 2 excavation. Sample T2-3 was collected from a depth of three feet on the north sidewall. Sample T2-6 was collected at a depth of three feet from the cavity bottom. Sample T2-7 was collected from a depth of three feet from the south sidewall. Two samples that had been collected prior to over excavation were composited together to create the stockpile sample labeled T2-1/T2-2.

UST # 3

Three samples were collected from the UST # 3 excavation. A composite sample labeled T3-1/3-2/3-3 was collected from the stockpile. The bottom sample T3-4 was collected from a depth of eight feet. The northwall sample, T3-5 was collected from a depth of six feet below ground surface.

ANALYTICAL RESULTS

All samples were analyzed by American Analytical Services, Inc. of Seattle , Washington. One sample was analyzed for diesel total petroleum hydrocarbons (TPH) by Washington State Method WTPH-D, two composite samples were analyzed for gasoline TPH by Washington State Method WTPH-G, and seven samples were analyzed for hydrocarbon identification by Washington State Method WTPH-HCID. The quantitation limits for this method are 20 ppm gasoline, 50 ppm diesel, and 100 ppm heavy oil. The analytical results are summarized in Table 1, the certificates of analysis and chain-of-custody form are contained in Appendix C.

UST # 1

Sample T1-1 from the diesel impacted soil stockpile had a diesel TPH concentration of 16,000 parts per million (ppm) as determined by WTPH-D. Excavation floor sample T1-2 had a diesel range TPH between 50 and 100 ppm as determined by WTPH-HCID. The composite sidewall sample T1-3 had non-detectable concentrations of TPH.

UST # 2

Stockpile composite sample T2-1/T2-2 displayed non-detectable concentrations of gasoline TPH. North sidewall sample T2-3 displayed TPH concentrations at less than or equal to the quantitation limits of the WTPH-HCID Method. Samples T2-6 and T2-7 had TPH concentrations less than the detection limits by the WTPH-HCID Method.

UST # 3

The stockpile composite sample T3-1/3-2/3-3 had a gasoline TPH concentration of 1030 ppm,

with volatile aromatic compound levels of 3.7 ppm benzene, 40 ppm toluene, 19.9 ethyl benzene, and 150 ppm total xylenes. Samples T3-4 and T3-5 both displayed TPH concentrations below the detection limits by WTPH-HCID.

CONCLUSIONS

Three USTs were decommissioned and removed from the site. Field evidence and analytical results indicate that releases occurred from all three USTs. The impacted soils from the UST areas were over-excavated and sampled. Results of the samples indicates that all petroleum contaminated soil was removed.

The analytical data indicate that the UST project area was in full compliance with applicable local, state, and federal environmental regulations at time of UST closure. It is recommended that no further action be taken at this time.

The excavations were backfilled with imported material to grade. According to Rainier Golf and Country Club the petroleum contaminated soils will be land farmed at the golf course. Both the gasoline and diesel contaminated soils are considered Class 4 by Ecology. This class of soil requires treatment prior to reuse on the site. Once the levels of contaminants are below 200 ppm diesel and 100 ppm gasoline the soils may be used for fill at the cleanup site. Fill in or near: wetlands, surface water, drinking water wells or utility trenches is not recommended.

LIMITATIONS

Work for this project was performed, and this report prepared, in accordance with generally accepted professional practices for the nature of the work and conditions of the work completed in the same or similar locations at the time the work was performed. O'Sullivan Omega results and findings from the select area do not necessarily reflect soil or ground water conditions underlying other areas of the site not investigated. This report is not meant to represent a legal opinion. No other warranty, expressed or implied, is made.

Any questions regarding our work or this report, the presentation of the information, and the interpretation of the data are welcome and should be referred to the undersigned.

Sincerely,
O'Sullivan Omega, Inc.



John Lillie
Project Geologist



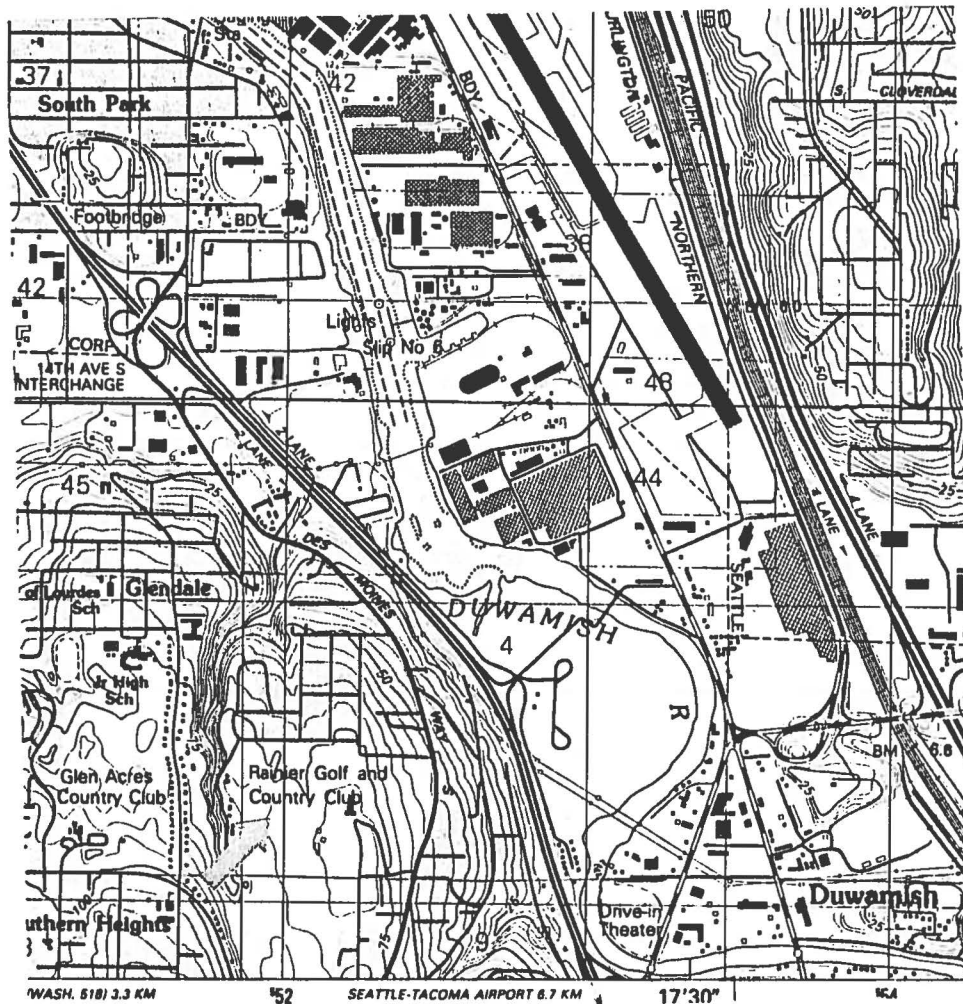
Paul Riley, M.S.
Environmental Services Manager

Attachments

cc:

Washington State Department of Ecology
Underground Storage Tank Section
P.O. Box 47775
Olympia, Washington 98504-7775

Rainier Golf & Country Club Site Vicinity Map



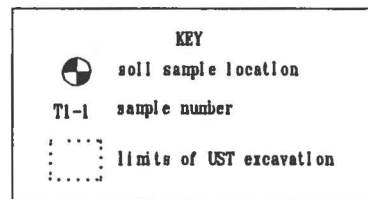
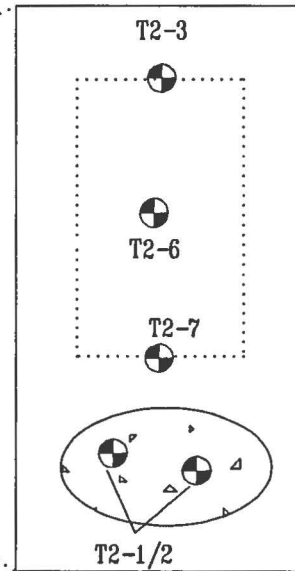
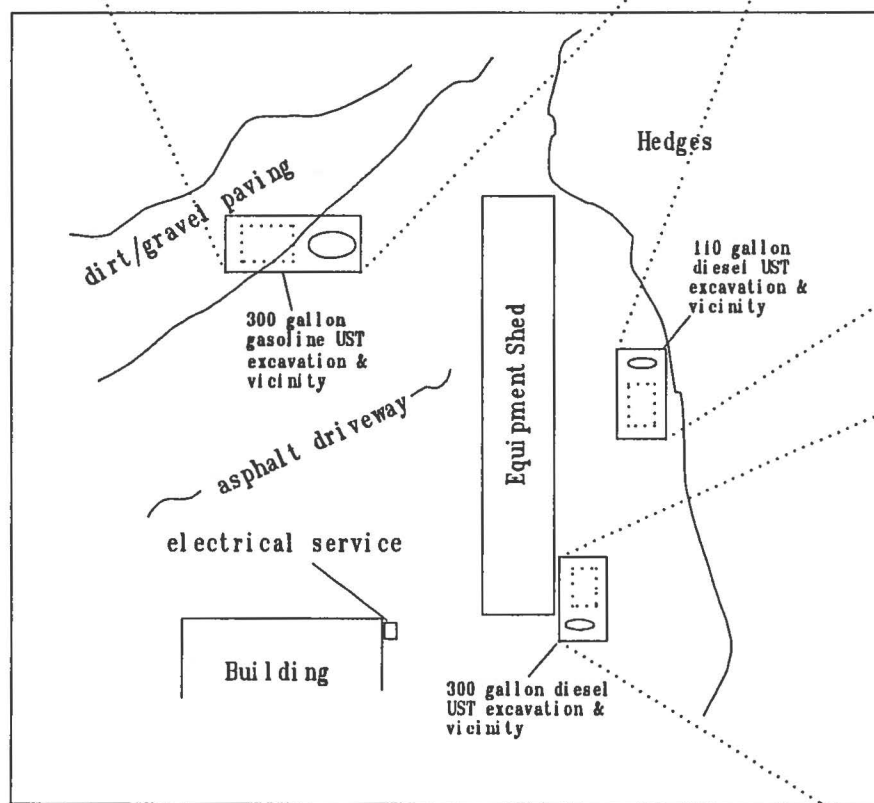
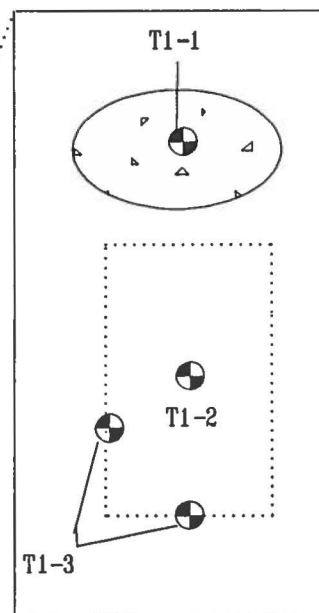
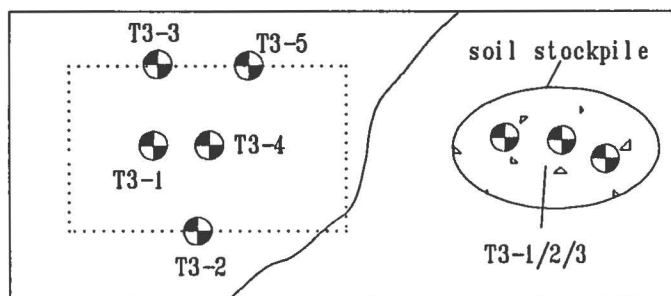
Seattle North
Washington
7.5 x 15 minute
quadrangle
USGS 1983



scale: 1:24 000

Figure 1

Rainier Golf & Country Club Soil Sampling Plan



samples collected on 4/15/1994

O'Sullivan Omega, Inc.
 Geologists, Environmental
 Specialists & General Contractor
 3214 - 16th Avenue SW
 Seattle, WA 98134

Table 1. Summary of Analytical Results for Rainier Golf and Country Club

Sample Number	Sample Type	Sample Location	Sample Method	Sample Depth	WTPH-HCID/TPH Results		
					Gasoline	Diesel	Heavy Oils
UST # 1 (110 gallon diesel)							
RGC-T1-1	soil/composite	stockpile	grab	NA	NA	16,000**	NA
RGC-T1-2	soil/discrete	bottom	grab	2	ND	trace	ND
RGC-T1-3	soil/composite	sidewalls	grab	2	ND	ND	ND
UST # 2 (300 gallon gasoline)							
RGC-T2-1/T2-2	soil/composite	stockpile	grab	3	ND*	NA	NA
RGC-T2-3	soil/discrete	north sidewall	grab	3	ND	ND	trace
RGC-T2-6	soil/discrete	bottom	grab	3	ND	ND	ND
RGC-T2-7	soil/discrete	south sidewall	grab	3	ND	ND	ND
UST # 3 (300 gallon gasoline)							
RGC-T3-1/3-2/3-3	soil/discrete	stockpile	grab		1030*	ND	ND
RGC-T3-4	soil/discrete	bottom	grab	8	ND	ND	ND
RGC-T3-5	soil/discrete	north sidewall	grab	6	ND	ND	ND
MTCA	---	---	---	---	100	200	200

All samples collected by O'Sullivan Omega on April 15, 1994.

Sample depth given in feet below ground surface.

All samples analyzed by semi-quantitative Washington State Test Method WTPH-HCID to determine the presence and type of total petroleum hydrocarbons (TPHs) as gasoline, diesel and/or heavy oils.

*, gasoline TPHs quantified using Washington State Test Method WTPH-G.

**, diesel TPHs quantified using Washington State Test Method WTPH-D.

TPH concentrations given in ppm, parts per million (mg/kg).

ND not detected

NA not analyzed

MTCA, Ecology's Model Toxics Control Act Method A Soil Cleanup Level for gasoline and diesel TPH in residential and industrial soil (WAC 173-340).

**APPENDIX A
PERMITS & SITE
ASSESSMENT CHECKLIST**



UNDERGROUND STORAGE TANK

30 DAY NOTICE

See back of form for instructions

Please ☒ the appropriate box☐Intent
to Install☒Intent
to Close☐

Both

For Office Use Only

Owner #

110005752

Site #

002451

SITE INFORMATION:

Site ID Number (on invoice or available from Ecology if the tank is registered):

Site/Business Name:

Rainier Golf & Country Club

Site Address:

1856 South 112th Street

Owner/Operator

Telephone:

(206) 242-4460

Seattle

Street

WA

98168

City

State

ZIP Code

TANK INFORMATION:

TANKS TO BE CLOSED

This section to be filled out ONLY if tanks are being removed

Tank ID	Projected Closure Date	Tank Capacity	Substance Stored	Date tank last used	Is there product in the tank? (yes/no)	If no, date tank was pumped
2-1-94		300	gasoline	11-1-93	NO	12-20-93
2-1-94		300	diesel	11-1-93	NO	12-20-93

TANKS TO BE INSTALLED

This section to be filled out ONLY if tanks are being installed

Tank ID Approx. Install Date

TANK INSTALLATION TO BE PERFORMED BY (if known):

This section to be filled out ONLY if tanks are being installed

Service Provider:

Contact Name:

Telephone: ()

Address:

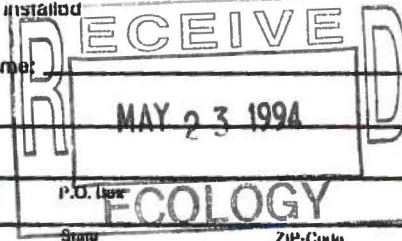
Street

City

P.O. Box

State

ZIP Code



TANK PERMANENT CLOSURE TO BE PERFORMED BY (if known):

This section to be filled out ONLY if tanks are being removed

Service Provider:

O'Sullivan Omega

Contact Name:

Karen Say

Telephone: (206)

682-2440

Address:

3214 16th Ave SW

Seattle

Street

WA

P.O. Box

98134

State

ZIP Code

This form will be returned to this address

UST OWNER/
OPERATOR

Rainier Golf & Country Club

ADDRESS

1856 South 112th Street

Seattle

Street

WA

98168

City

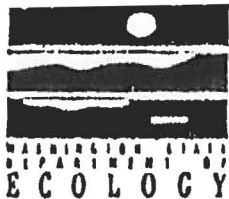
State

ZIP Code

Once validated by Ecology, this form serves as your temporary permit for the tanks listed above.

Please type or print information

ECY 020-31



UNDERGROUND STORAGE TANK TEMPORARY/PERMANENT CLOSURE and SITE ASSESSMENT NOTICE

See back of form for instructions
Please ☒ the appropriate box(es)
Please type or print information

WN

For Office Use Only
Owner # U 0005752
Site # 002451

☐ Temporary Tank Closure ☒ Permanent Tank Closure ☐ Change-In-Service ☐ Site Assessment/Site Check

SITE INFORMATION:

Site ID Number (on invoice or available from Ecology if the tanks are registered): _____
Site/Business Name: Rainier Golf and Country Club
Site Address: 1856 112th Street Telephone: (206) 242-4460
Seattle, Wa. 98168
City State ZIP-Code

TANK INFORMATION:

Tank ID	Closure Date	Tank Capacity	Substance Stored
<u>1</u>	<u>4/15/94</u>	<u>110 gal.</u>	<u>Diesel</u>
<u>2</u>	<u>4/15/94</u>	<u>300 gal.</u>	<u>Gasoline</u>
<u>3</u>	<u>4/15/94</u>	<u>300 gal.</u>	<u>Gasoline</u>

CONTAMINATION PRESENT AT THE TIME OF CLOSURE

☒ Yes 5/31/94 ☒ No



Check unknown if no obvious contamination was observed and sample results have not yet been received from analytical lab.

UST SYSTEM OWNER/OPERATOR:

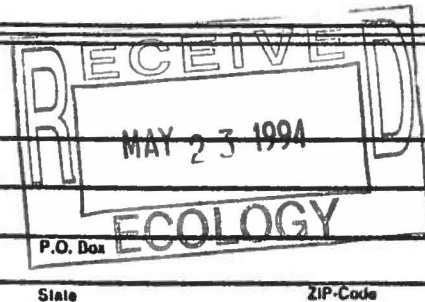
UST Owner/Operator: Rainier Golf & Country Club
Owners Signature: Ron D. Norton Supt. Telephone: (206) 242-4460
Address: 1856 S 112th St. P.O. Box _____
Seattle, Wa. 98168
City State ZIP-Code

TANK CLOSURE/CHANGE-IN-SERVICE PERFORMED BY:

Service Provider: O'Sullivan Omega License Number: S000036
Licensed Supervisor: Don Airey Decommissioning License Number: W0001771
Supervisors Signature: [Signature]
Address: 3214 - 16th Ave. S.W. P.O. Box _____
Seattle, WA 98134
City State ZIP-Code
Telephone: (206) 682-2440

SITE CHECK/SITE ASSESSMENT CONDUCTED BY:

Name of Registered Site Assessor: John T. Lillie
Telephone: (206) 682-2440
Address: 3214 16th Ave S.W. P.O. Box _____
Seattle, Wa. 98134
City State ZIP-Code





UNDERGROUND STORAGE TANK Site Check/Site Assessment Checklist

For Office Use Only

Owner # 110005752
Site # 002451

INSTRUCTIONS:

When a release has not been confirmed and reported, this Site Check/Site Assessment Checklist must be completed and signed by a person registered with the Department of Ecology. The results of the site check or site assessment must be included with this checklist. This form must be submitted to Ecology at the address shown below within 30 days after completion of the site check/site assessment.

SITE INFORMATION: Include the Ecology site ID number if the tanks are registered with Ecology. This number may be found on the tank owner's invoice or tank permit.

TANK INFORMATION: Please list all the tanks for which the site check and site assessment is being conducted. Use the tank ID number if available, and indicate tank capacity and substance stored.

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT: Please check the appropriate item.

CHECKLIST: Please initial each item in the appropriate box.

SITE ASSESSOR INFORMATION: This form must be signed by the registered site assessor who is responsible for conducting the site check/site assessment.

Underground Storage Tank Section
Department of Ecology
P. O. Box 47655
Olympia, WA 98504-7655

SITE INFORMATION

Site ID Number (on invoice or available from Ecology if the tanks are registered): _____

Site/Business Name: Rainier Golf and Country Club

Site Address: 1856 S. 112th St. Telephone: (206) 242-4460

Seattle
City

Wa.
State

98168
ZIP-Code

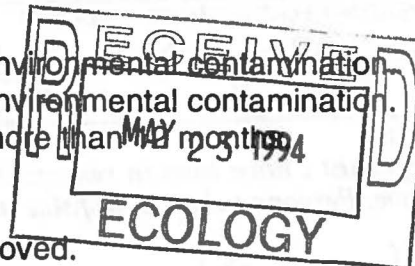
TANK INFORMATION

Tank ID No.	Tank Capacity	Substance Stored
<u>1</u>	<u>110 gal.</u>	<u>diesel</u>
<u>2</u>	<u>300 gal.</u>	<u>gasoline</u>
<u>3</u>	<u>300 gal.</u>	<u>gasoline</u>

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT

Check one:

- ☐ Investigate suspected release due to on-site environmental contamination.
- ☐ Investigate suspected release due to off-site environmental contamination.
- ☐ Extend temporary closure of UST system for more than 12 months.
- ☐ UST system undergoing change-in-service.
- ☐ UST system permanently closed-in-place.
- ☒ UST system permanently closed with tank removed.
- ☐ Abandoned tank containing product.
- ☐ Required by Ecology or delegated agency for UST system closed before 12/22/88.
- ☐ Other (describe): _____



CHECKLIST

Each item of the following checklist shall be initialed by the person registered with the Department of Ecology whose signature appears below.

	YES	NO
1. The location of the UST site is shown on the vicinity map.	<i>JA</i>	
2. A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in the Site Assessment Guidance)	<i>JA</i>	
3. A summary of UST system data is provided. (see Section 3.1)	<i>JA</i>	
4. The soils characteristics at the UST site are described. (see Section 5.2)	<i>JA</i>	
5. Is there apparent groundwater in the tank excavation?	<i>JA</i>	<i>JA</i>
6. A brief description of the surrounding land is provided. (see Section 3.1)	<i>JA</i>	
7. Information has been provided indicating the number and types of samples collected, methods used to collect and analyze the samples, and the name and address of the laboratory used to perform the analyses.	<i>JA</i>	
8. A sketch or sketches showing the following items is provided:		
- location and ID number for all field samples collected	<i>JA</i>	
- groundwater samples distinguished from soil samples (if applicable)	<i>JA</i>	
- samples collected from stockpiled excavated soil	<i>JA</i>	
- tank and piping locations and limits of excavation pit	<i>JA</i>	
- adjacent structures and streets	<i>JA</i>	
- approximate locations of any on-site and nearby utilities	<i>JA</i>	
9. If sampling procedures different from those specified in the guidance were used, has justification for using these alternative sampling procedures been provided? (see Section 3.4)		<i>JA</i>
10. A table is provided showing laboratory results for each sample collected including: sample ID number, constituents analyzed for and corresponding concentration, analytical method and detection limit for that method.	<i>JA</i>	
11. Any factors that may have compromised the quality of the data or validity of the results are described.		<i>JA</i>
12. The results of this site check/site assessment indicate that a confirmed release of regulated substance has occurred.	<i>JA</i>	

SITE ASSESSOR INFORMATION

<u>John T. Lillie</u> PERSON REGISTERED WITH ECOLOGY	<u>O'Sullivan Omega</u> FIRM AFFILIATED WITH	
BUSINESS ADDRESS: <u>3214 16th Ave S.W.</u> <u>Seattle, Wa 98134</u>	TELEPHONE: ()	
CITY	STATE	ZIP+CODE
I hereby certify that I have been in responsible charge of performing the site check/site assessment described above. Persons submitting false information are subject to penalties under Chapter 173-360 WAC.		
<u>April 15, 94</u> Date	<u>John T. Lillie</u> Signature of Person Registered with Ecology	



King County
Department of Development
and Environmental Services
3600 - 136th Place Southeast
Bellevue, Washington 98006-1400

Activity No: B94A0807
Project No: C9002376
Page: 1 of 1
Date Issued: 03/01/94
EXPIRES: 03/01/95

ISSUED

* CONSTRUCTION PERMIT *

Permit Type: FLAMMABLE LIQUIDS STORAGE TANK Type Code: FIRETANK
Title: 3 TANK REMOVALS/1 ABVGRND TANK Valuation: 0
Description: REPLACEMENT/RAINIER GOLF & COUNTRY CLUB
Occup'y/Type: Class: 037

Location: 1856 S 112TH ST KC Zone: RS7200
Parcel: 098500-0005 STR: W ,NW,09-23-04 Block: 1
Lot: 1 THRU 26 Plat: BOULEVARD PARK ADD

Applicant: RAINIER GOLF & COUNTRY CLUB Phone:
Appl.Address: C/O CONTR

CONTRACTOR: O'SULLIVAN PETROLEUM EQUIP CO Lic. C OSULLPE099PW 206 682 2440
3214 16TH AVE S W
SEATTLE WA 98134

OTHER INFORMATION:

Fire District:	FD #11
Remove Existing Tank?	3 TANKS (Y/N)
Replace Existing Tank?	ABVGRND (Y/N)
Install New Tank?	N (Y/N)

COMMENTS AND CONDITIONS

1. This permit is subject to all corrections indicated on the associated plans and attached conditions and must be posted on the job site at all times in a visible and readily accessible location.
2. Work may proceed only at the direction of the field inspector. Prior to starting any work you must schedule a pre-construction conference. Major work may require TWO days notice to schedule the conference.
3. Inspections may be requested at any time by calling 296-6615. To schedule an appointment with the Building or Fire inspector, call 296-6615 between 7:30 A.M. and 9:00 A.M. Requests received in the morning may not be processed in time for an inspection that day.
4. Please note the expiration date on this permit located in the upper right corner. A permit may be renewed only if a request to do so is received at least 30 days prior to the expiration date.



**APPENDIX B
TANK CLOSURE
DOCUMENTATION**

Coastal Tank Cleaning, Inc.

3801 7th Avenue South, Seattle, WA 98108

TO: O'SULLIVAN CONSTRUCTION # 8631-94

THIS LETTER IS TO CERTIFY THAT COASTAL TANK CLEANING, INC. HAS STRIPPED AND RINSED WITH SOAPY WATER THE BELOW LISTED TANKS IN ORDER TO ALLOW THE TANKS TO BE INERTED.

DATED THIS 14th DAY OF APRIL, 1994AUTHORIZED SIGNATURE: JH Austin CTC

- 1- 110 GAL. DIESEL U.S.T.
- 2- 300 GAL. GASOLINE U.S.T.'s

LOCATED AT:

RAINIER GOLF & COUNTRY CLUB

1856 112th S.

SEATTLE, W.N.

Industrial & Marine Tank Cleaning

Coastal Tank Cleaning, Inc.

3801 7th Avenue South, Seattle, Washington 98108

DISPOSAL CERTIFICATION

DATE: April 20, 1994

TO: O'Sullivan Omega
3214 16th Ave SW
Seattle, Wa. 98134

Job Site Address: Rainer Golf & Country Club

Your PO#: 17427

Our Job#: 8631-94

Dear Sirs,

This letter is to certify that Coastal Tank Cleaning, Inc. (CTC) has received the following tank(s) for cleaning and disposal in accordance with all Federal, State and Local rules and regulations:

- 1: 100 gallon
- 2: 300 gallon
- 3: 300 gallon

DATE RECEIVED: 4/15/94

DATE CLEANED: 4/19/94

MARINE CHEMIST CERT. #: 42146

DATE DISPOSED: 4/20/94

BILL OF LADING #:5134

METHOD OF DISPOSAL: Scrap Metal

If you have any questions regarding this matter please feel free to call at (206) 624-9843

Sincerely,



Don Austin
UST DISPOSAL MANAGER

**APPENDIX C
CERTIFICATES OF
ANALYSIS**



AMERICAN

ANALYTICAL SERVICES, INC.

April 25, 1994

RECEIVED

APR 29 1994

O'SULLIVANPETROLEUMEQUIP.CO.

O'Sullivan Omega
3214 16th Ave SW
Seattle, WA 98134
Attn.: J.T. Lillie/Karen

Dear John/Karen:

Enclosed are the results of the analyses of samples submitted on 4/15/94 from your Rainier Gold Course project.

We appreciate the opportunity to be of service to you on this project. If you have any questions regarding the reported results, please feel free to call me.

Sincerely,

Jerry L. Lofgren
Laboratory Manager

enclosures



Date of Report: 4/25/94
Samples Submitted: 4/15/94
File ID: 04-061
Analysis: WTPH-HCID
Unit: mg/kg (ppm)

Client: O'Sullivan Omega
Project: Rainier Gold Course
Project #: 2634-008
Matrix: Soil

Results			
Lab ID	Client ID	GC Characterization	Surrogate Recovery
04-061-2	RGC-T1-2	The chromatogram indicates the presence of hydrocarbons in the Diesel (C12-C24) range.	110%
04-061-3	RGC-T1-3	<20 ppm Gasoline <50 ppm Diesel <100 ppm Oil	93%
04-061-6	RGC-T2-3	The chromatogram indicates the presence of hydrocarbons in the Heavy Oil (>C24) range.*	104%
04-061-7	RGC-T2-6	<20 ppm Gasoline <50 ppm Diesel <100 ppm Oil	114%
04-061-8	RGC-T2-7	<20 ppm Gasoline <50 ppm Diesel <100 ppm Oil	118%
04-061-12	RGC-T3-4	<20 ppm Gasoline <50 ppm Diesel <100 ppm Oil	121%
04-061-13	RGC-T3-5	<20 ppm Gasoline <50 ppm Diesel <100 ppm Oil	120%

Quality Assurance

Method Blank	<20 ppm Gasoline <50 ppm Diesel <100 ppm Oil	110%
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ppm - parts per million

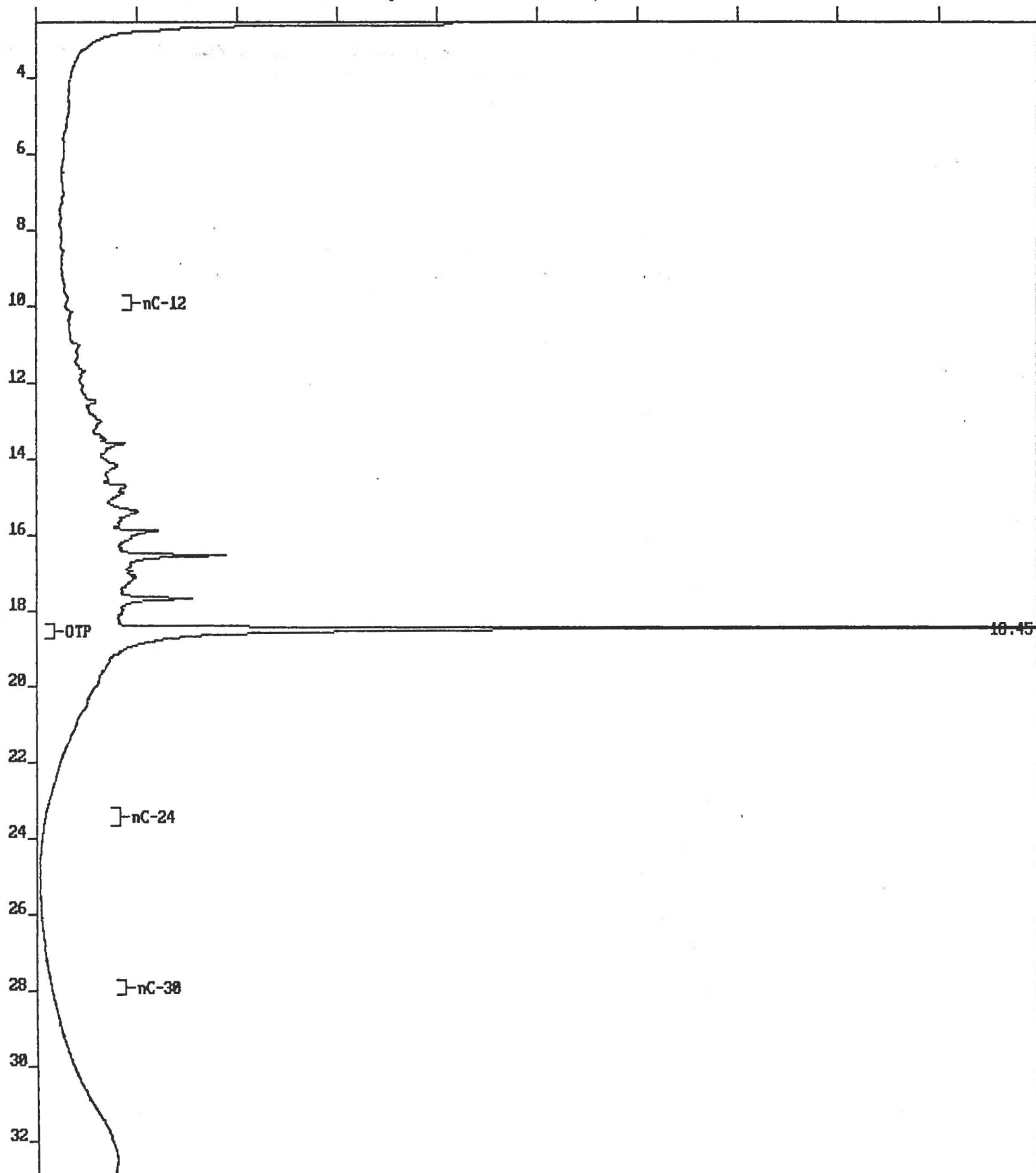
* - Trace, less than the quantitation limit.



RGC-T1-2

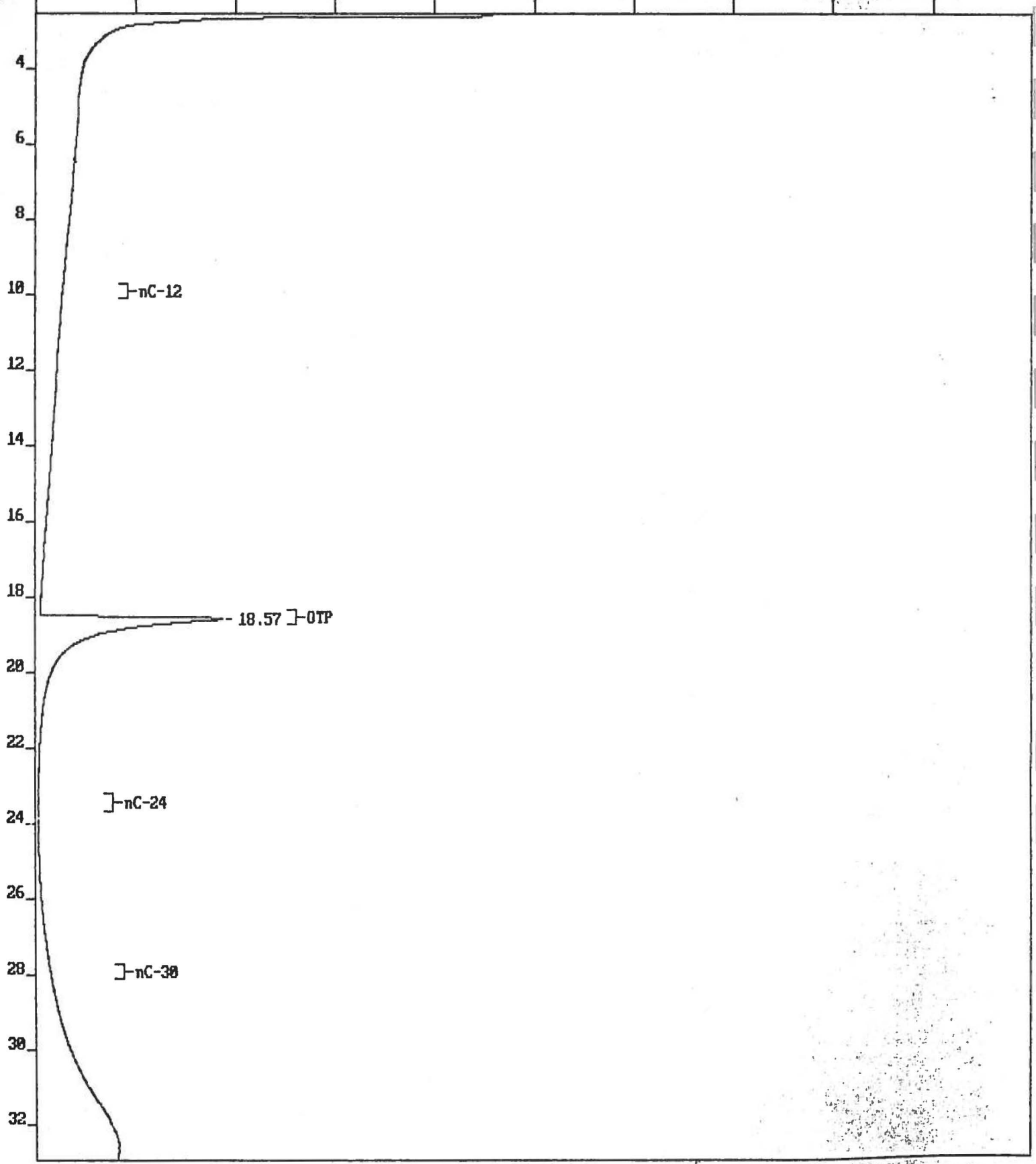
file=c:\cp\data\940416F.10R Date printed = 04-16-1994 Time = 21:41:12

2.50 to 33.00 min. Low Y = 0.27720 mv High Y = 4.27720 mv Span = 4.00000 mv



RGC-T1-3

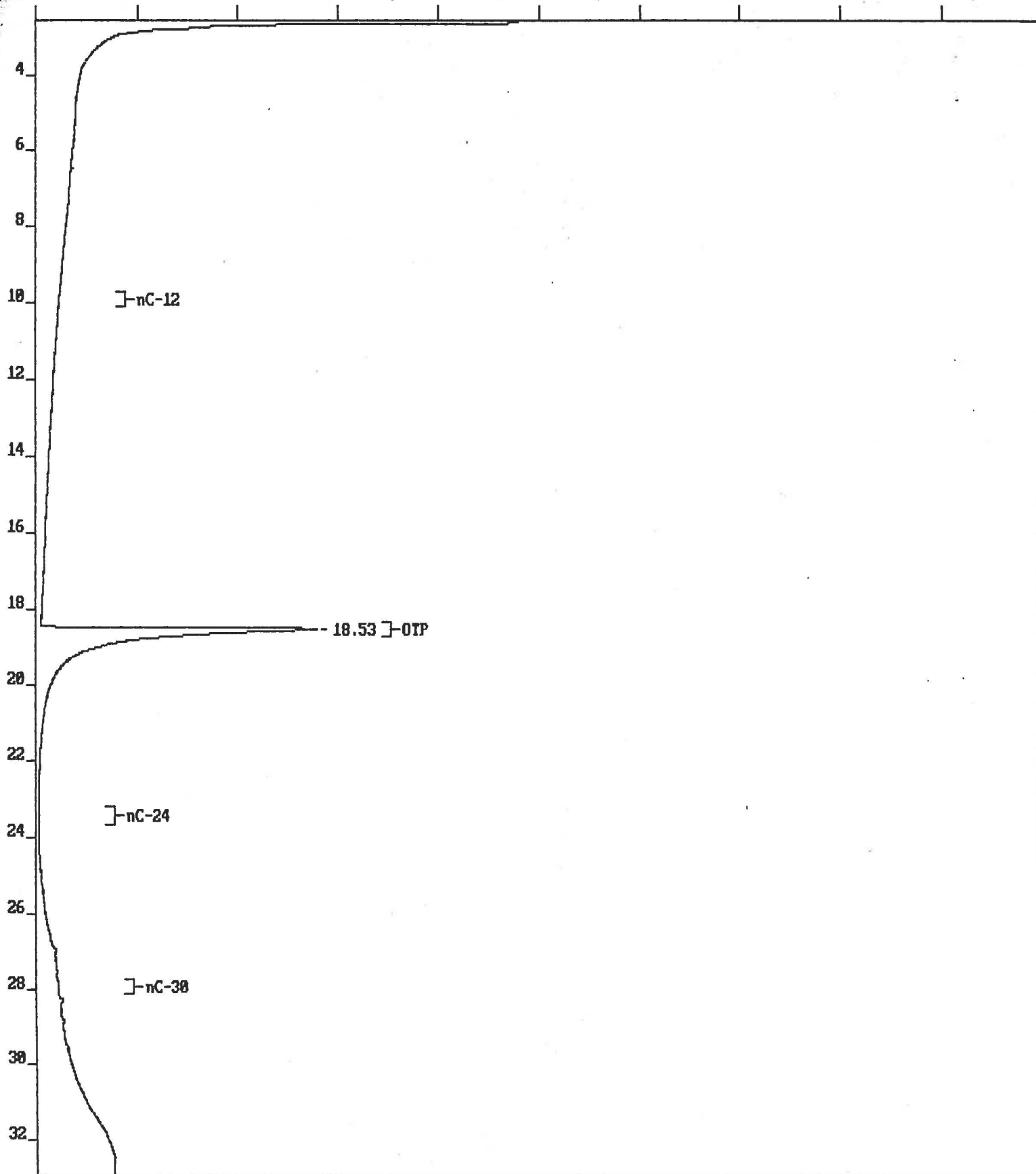
c:\cp\data\940416F.11R Date printed = 04-16-1994 Time = 22:27:48
2.50 to 33.00 min. Low Y = 0.20823 mv High Y = 4.20823 mv Span = 4.00000 mv



R4C-72-3

File: c:\cp\data\1940416F.12R Date printed = 04-16-1994 Time = 23:14:25

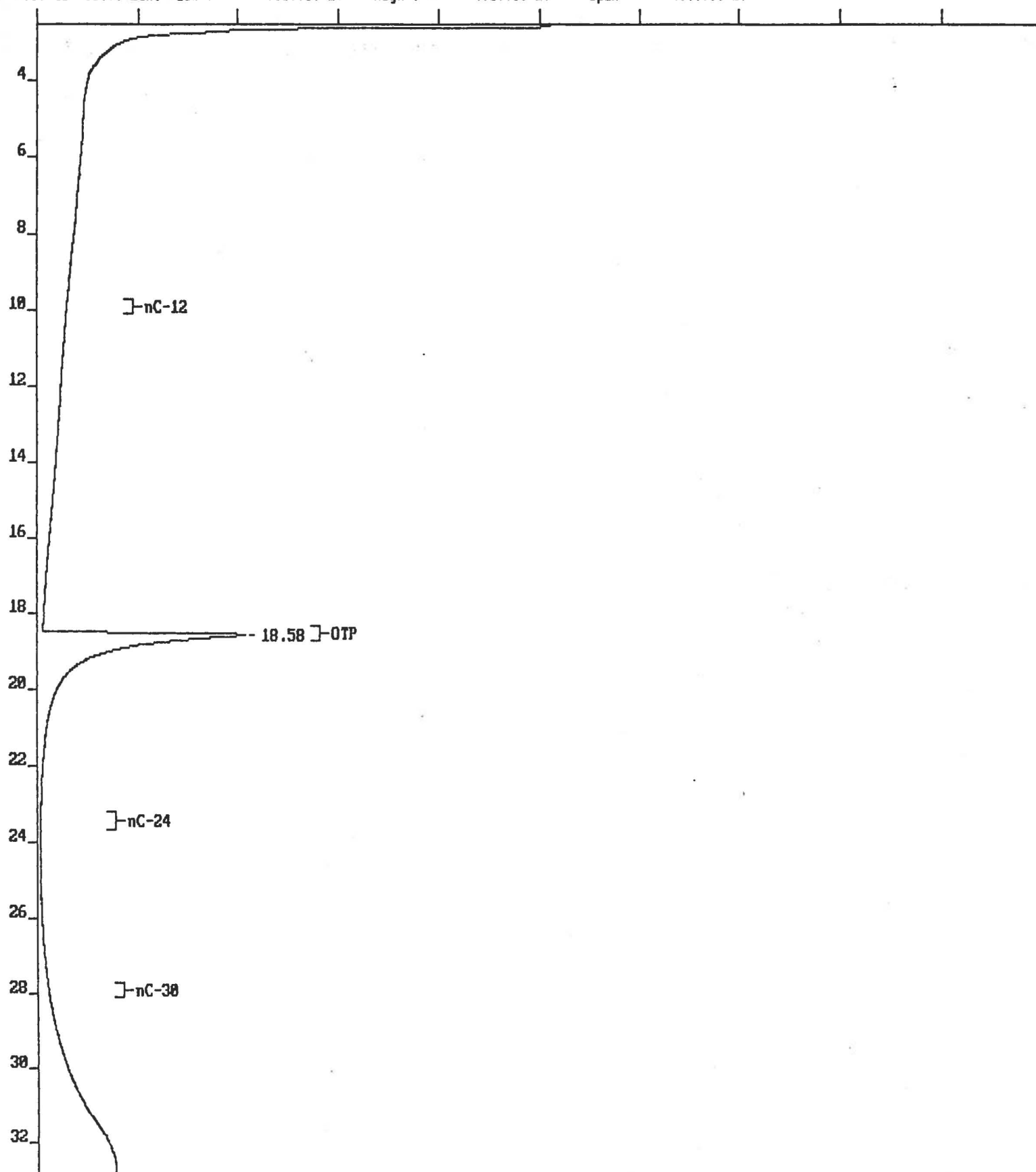
2.50 to 33.00 min. Low Y = 0.22354 mv High Y = 4.22354 mv Span = 4.00000 mv



RGc-T2-6

le=c:\cp\data1\940416F.13R Date printed = 04-17-1994 Time = 00:00:44

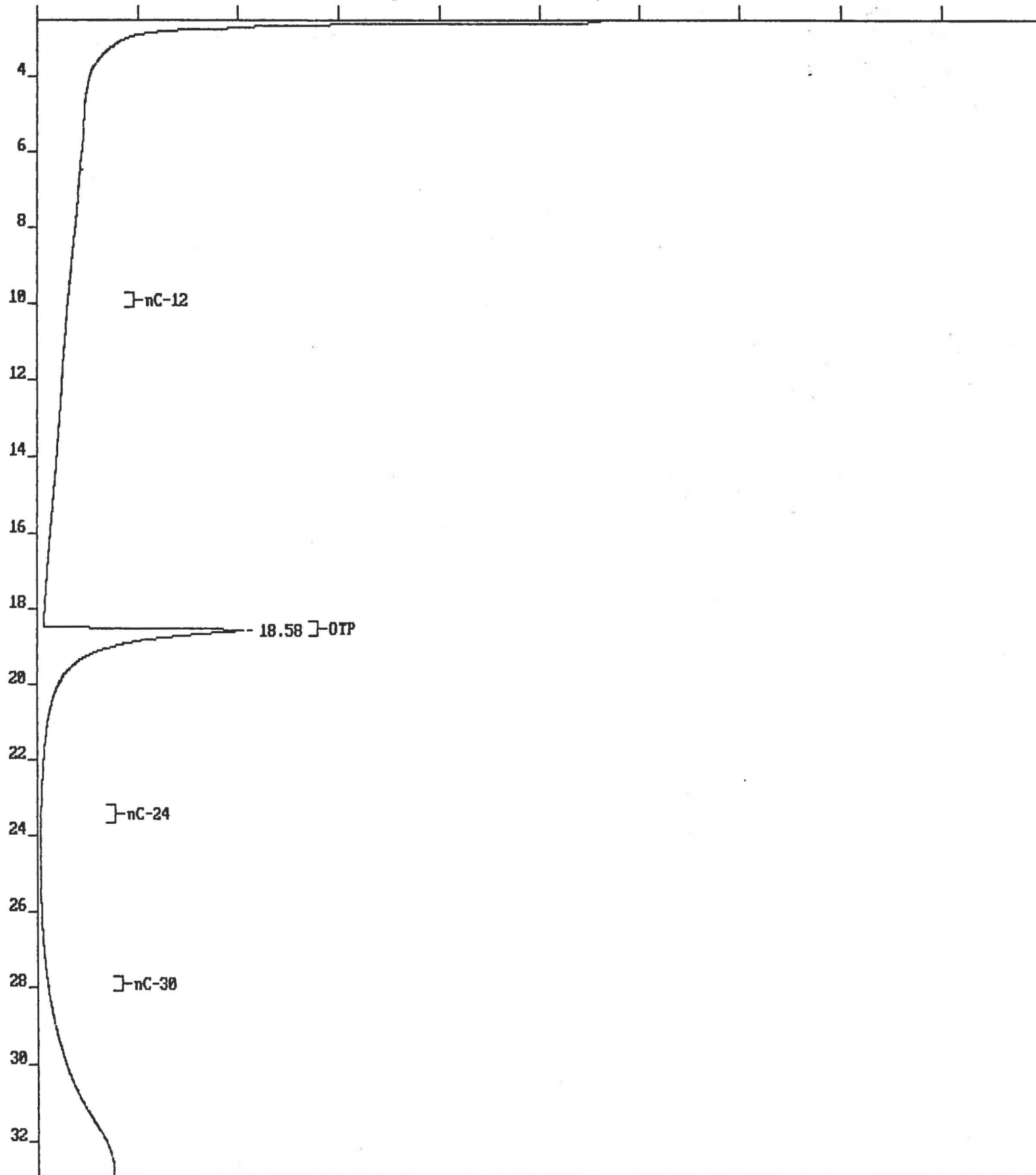
2.50 to 33.00 min. Low Y = 0.19950 mv High Y = 4.19950 mv Span = 4.00000 mv



RGL-T2-7

file=c:\cp\data1\940416F.14R Date printed = 04-17-1994 Time = 00:47:05

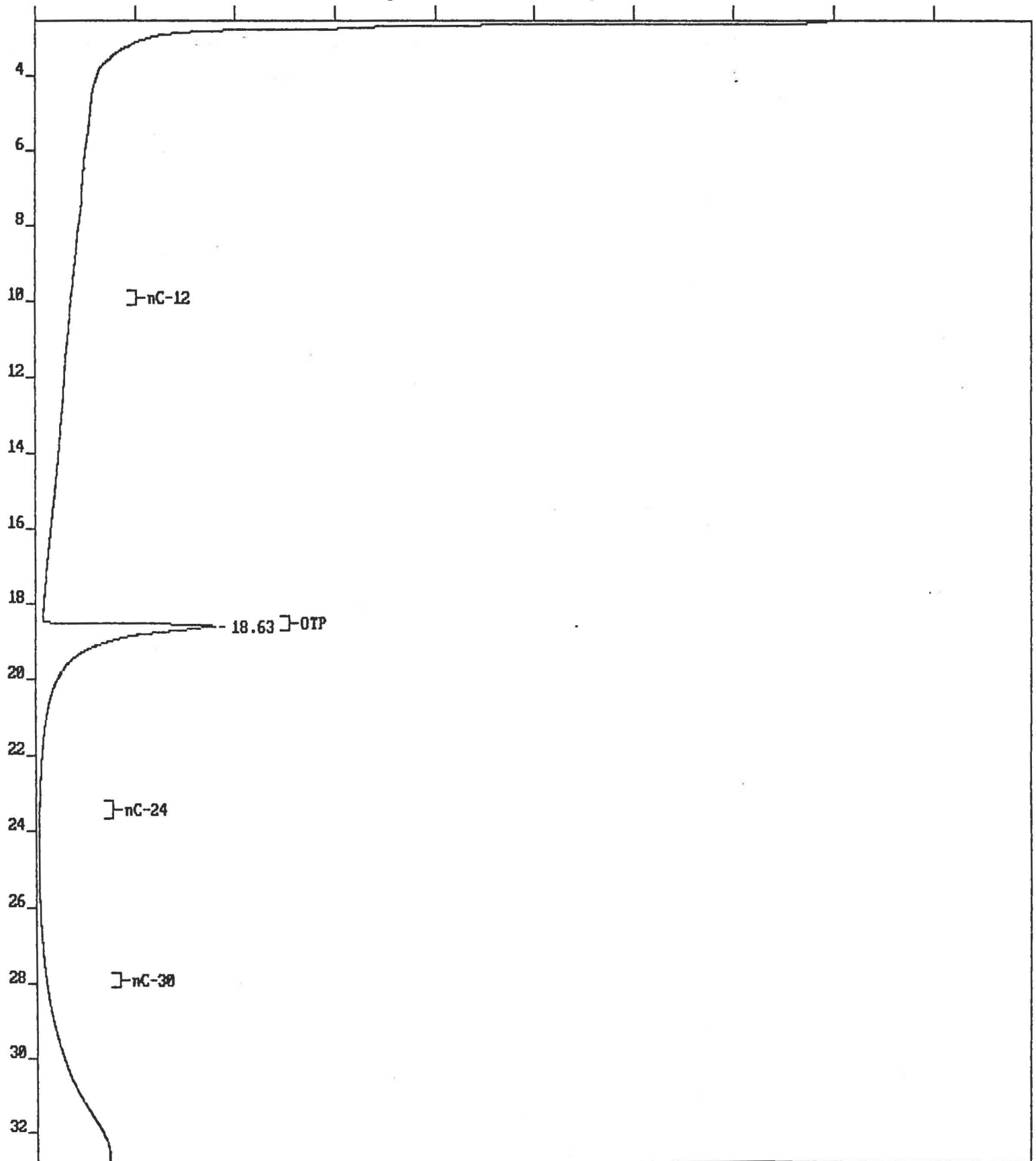
2.50 to 33.00 min. Low Y = 0.19686 mv High Y = 4.19686 mv Span = 4.00000 mv



RGL-T3-4

File=c:\cp\data1\940416F.15R Date printed = 04-17-1994 Time = 01:32:55

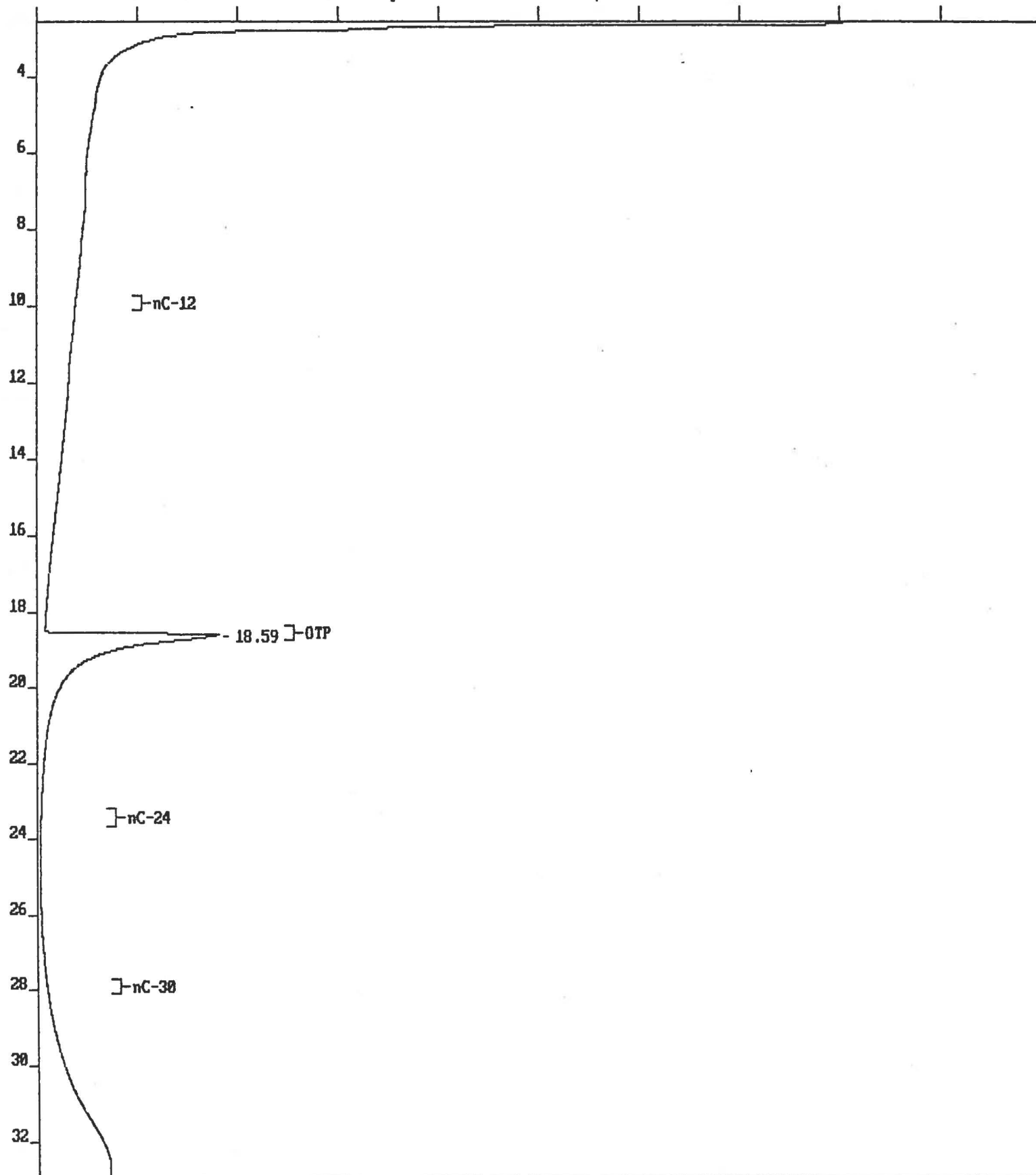
2.50 to 33.00 min. Low Y = 0.19090 mv High Y = 4.19090 mv Span = 4.00000 mv



RGL-T3-5

File=c:\cp\data1\940416F.16R Date printed = 04-17-1994 Time = 02:18:50

2.50 to 33.00 min. Low Y = 0.18768 mv High Y = 4.18768 mv Span = 4.00000 mv



Date of Report: 4/25/94
Samples Submitted: 4/15/94
File ID: 04-061
Analysis: WTPH-D
Units: mg/kg (ppm)

Client: O'Sullivan Omega
Project: Rainier Gold Course
Project #: 2634-008
Matrix: Soil

Results

Lab ID	Client ID	Result	Surrogate Recovery
04-061-1	RGC-T1-1	16,000	121%

Quality Assurance

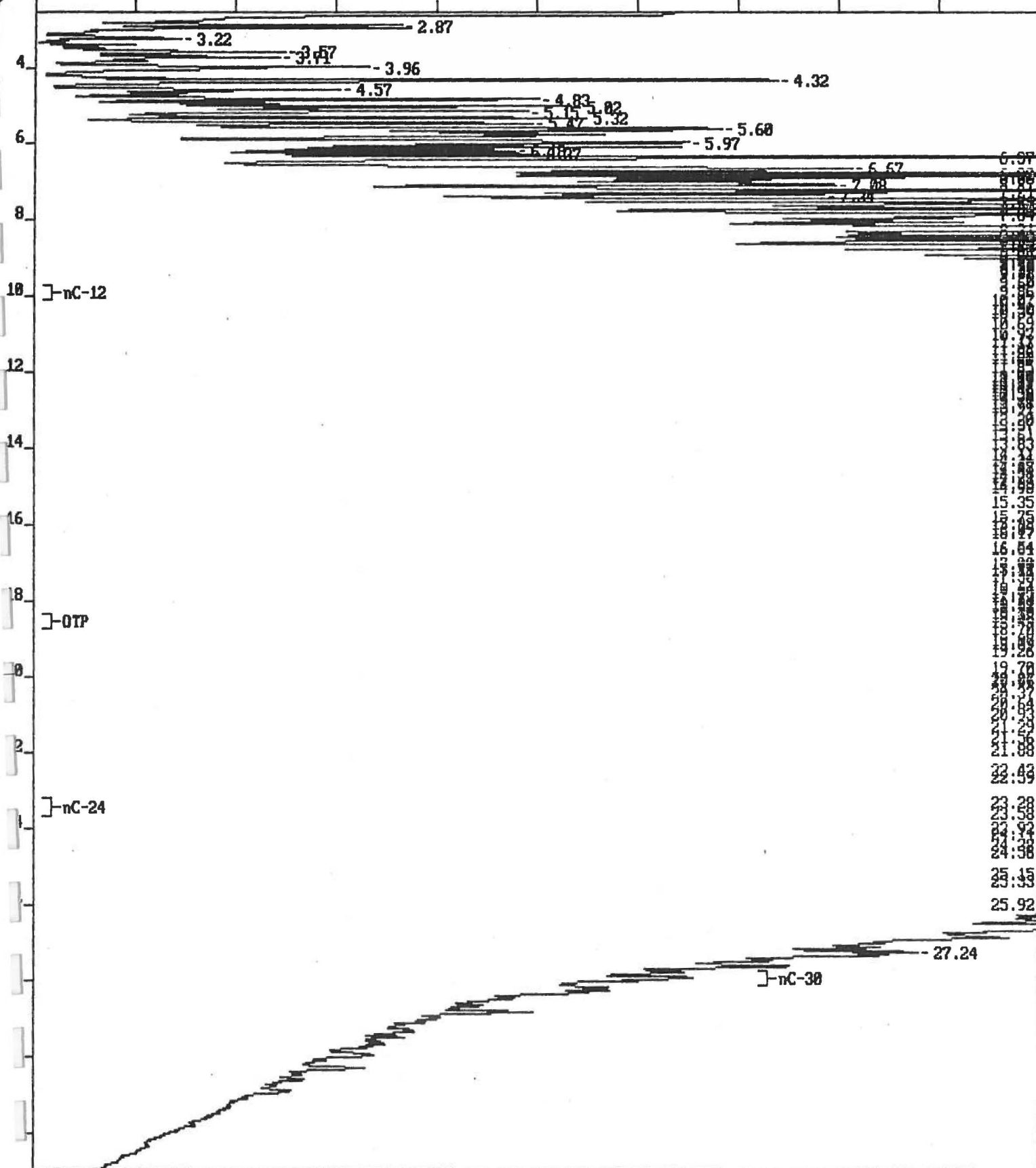
04-061-1 Duplicate	15,000	126%
Method Blank	<50	110%
04-061-1 Matrix Spike	Y	Y
Blank Spike	105%	96%

ppm - parts per million

Y - Interferences were present which prevented quantitation of the surrogate recovery.



100-11-1



Date of Report: 4/25/94
Samples Submitted: 4/15/94
File ID: 04-061
Analysis: WTPH-G/BTEX
Units: mg/kg (ppm)

Client: O'Sullivan Omega
Project: Rainier Gold Course
Project #: 2634-008
Matrix: Soil

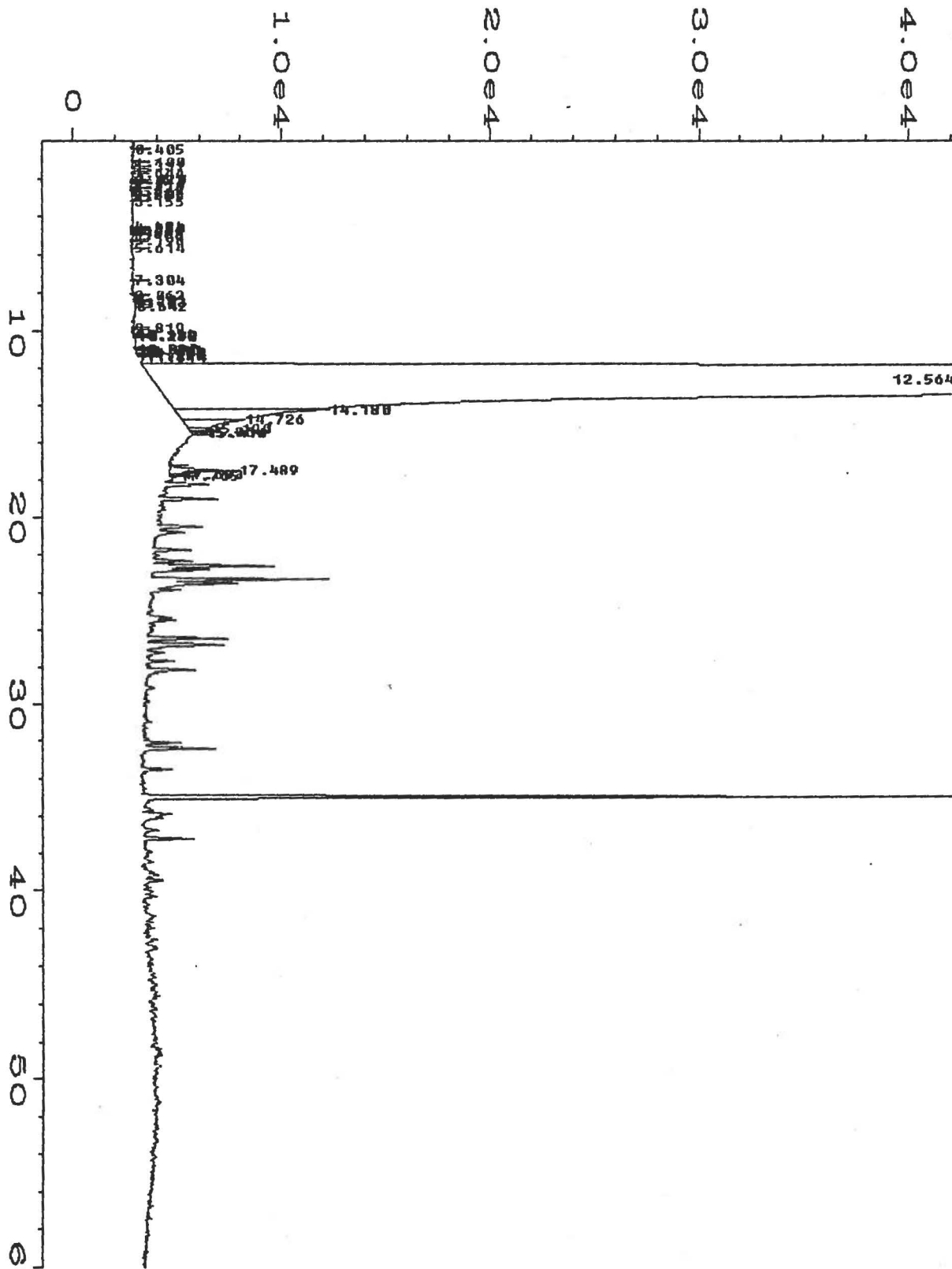
Results

Lab ID	Client ID	Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes	BFB % Surrogate Recovery
04-061-4:5	T2-1/T2-2	<5	<0.05	<0.05	<0.05	<0.05	110%
04-061-9:10:11	T3-1/T3-2/T3-3	1,030	3.7	40	19.9	150	Y
<u>Quality Assurance</u>							
Method Blank		<5	<0.05	<0.05	<0.05	<0.05	96%

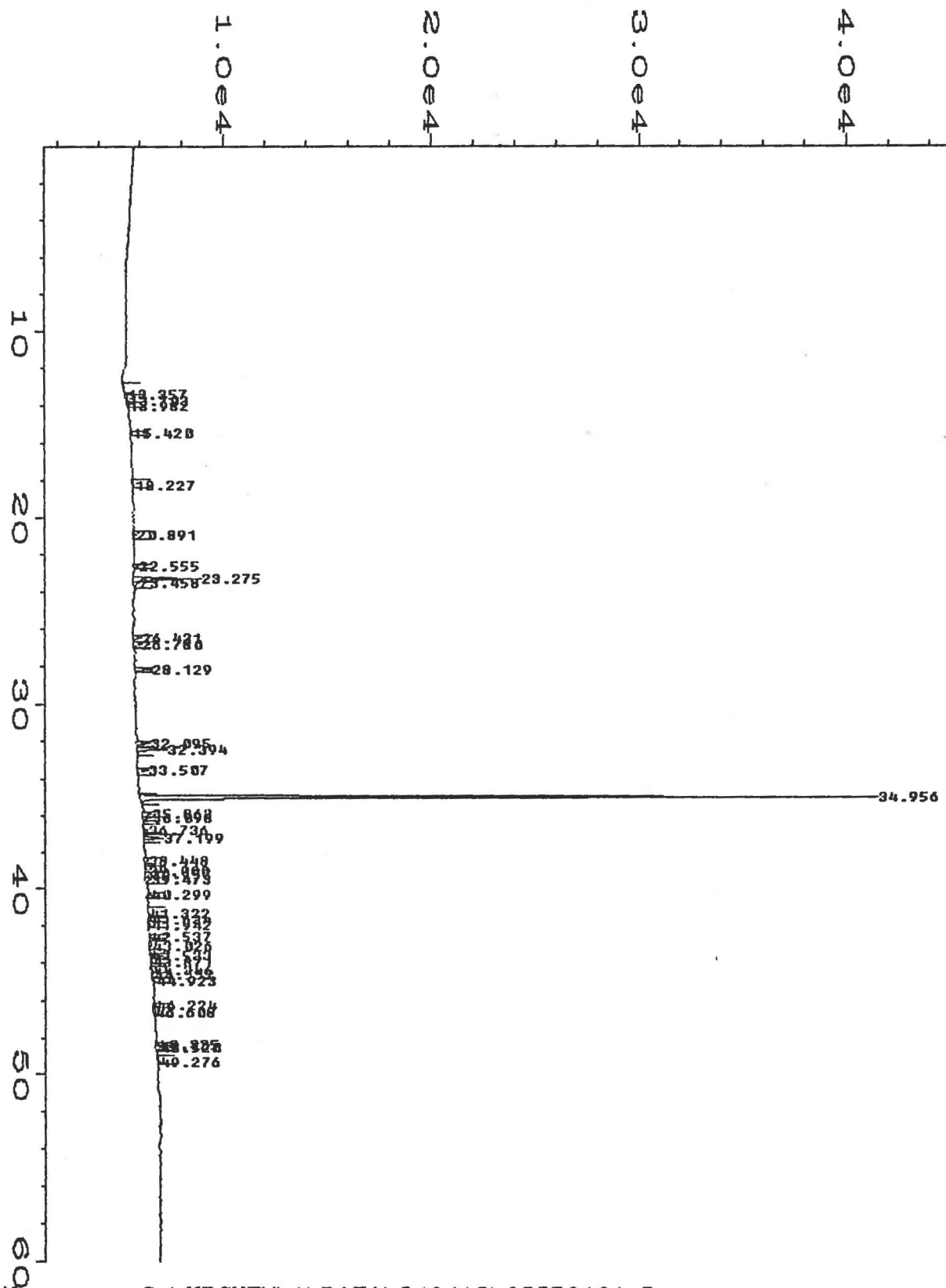
ppm - parts per million

Y - Interferences were present which prevented quantitation of the surrogate recovery.

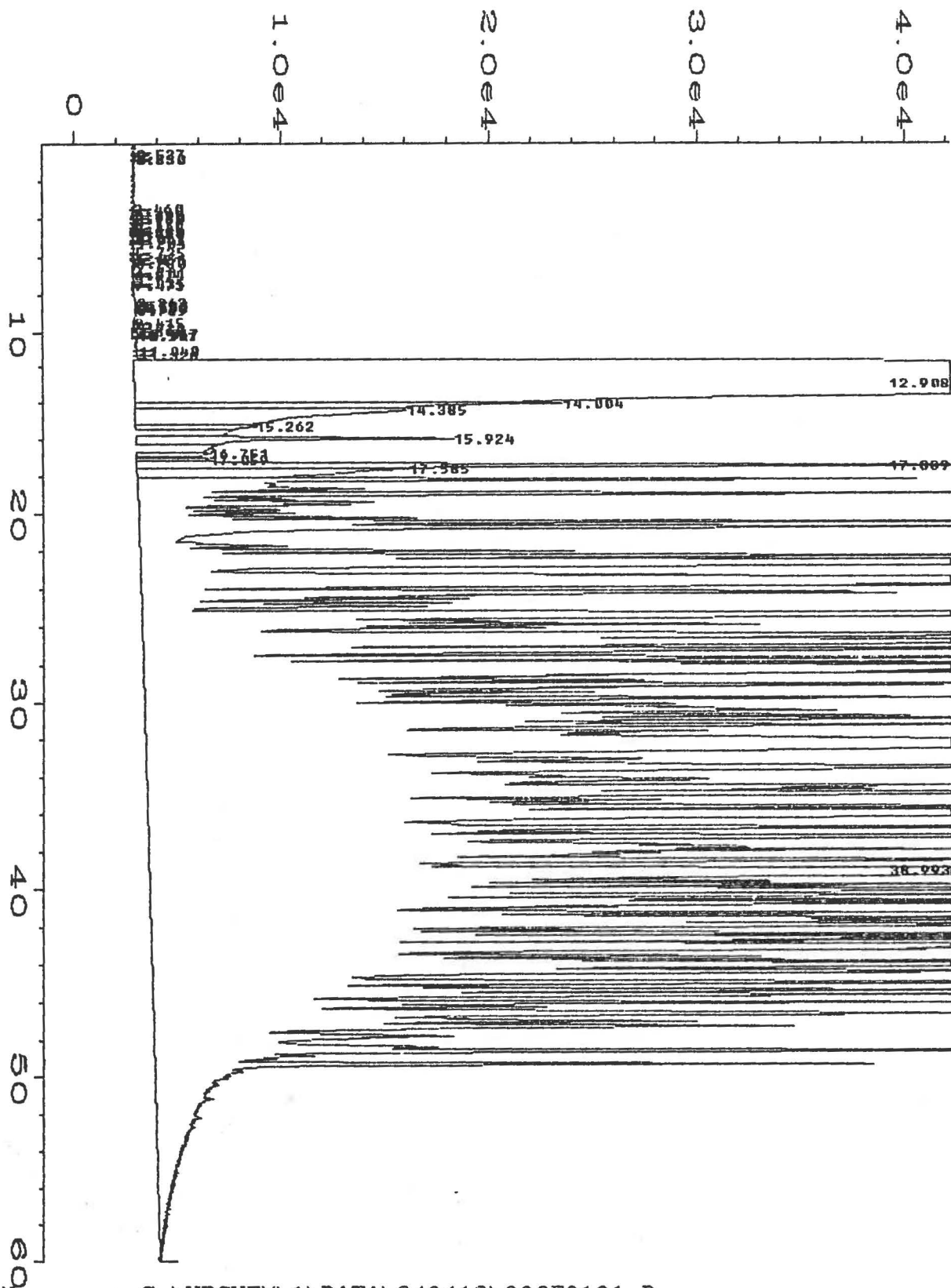




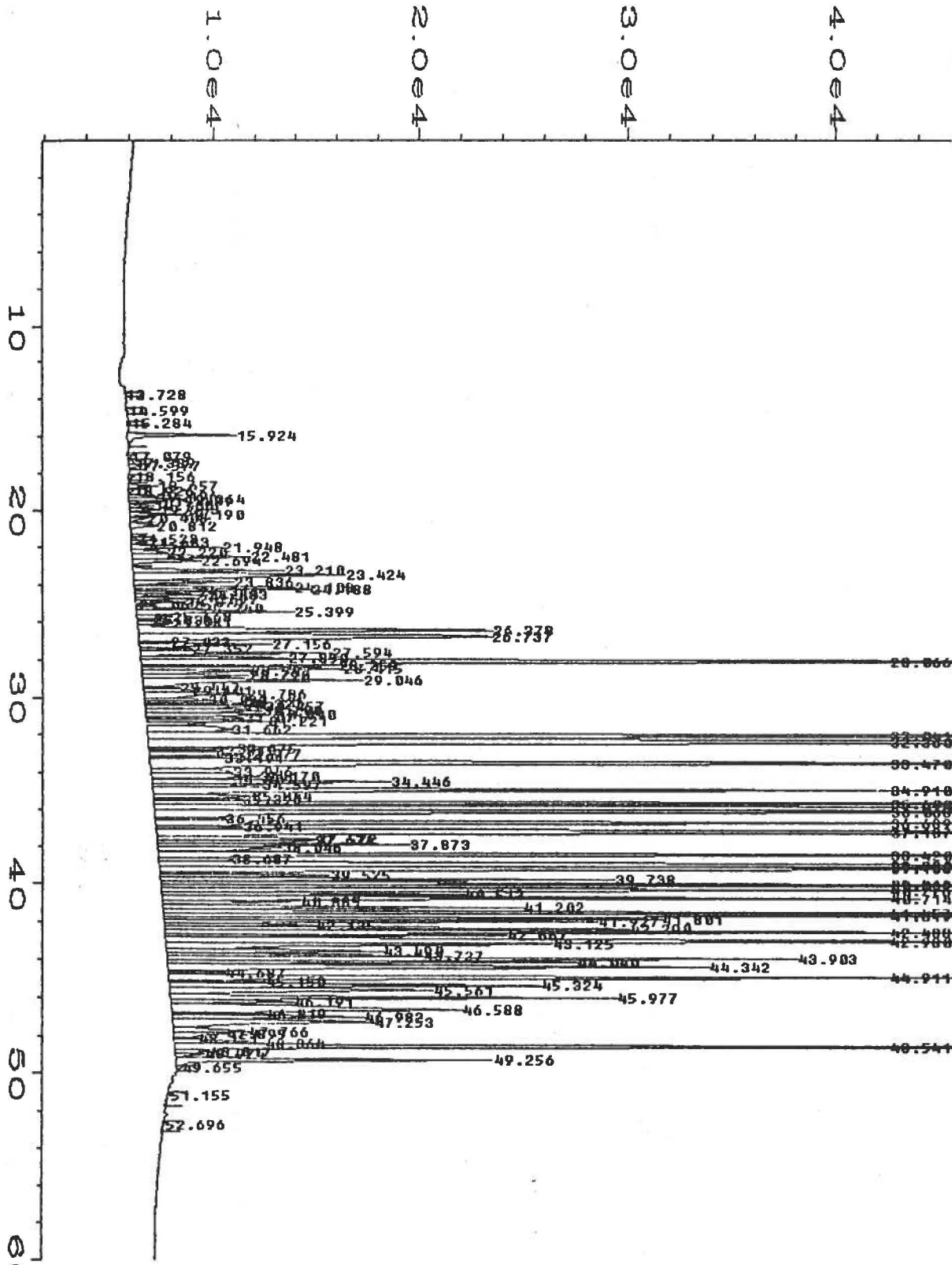
Data File Name	: C:\HPCHEM\1\DATA\940419\005F0101.D	Page Number	: 1
Operator	: jll	Vial Number	: 5
Instrument	: GC3	Injection Number	: 1
Sample Name	: 94-061-4/5 5.1g	Sequence Line	: 1
Print Time Bar Code		Instrument Method	: GASOLINE.MTH
Acquired on	: 19 Apr 94 02:42 PM	Analysis Method	: GASOLINE.MTH
Report Created on	: 19 Apr 94 03:43 PM	Sample Amount	: 0
Last Recalib on	: 20 JAN 93 10:31 AM		
Multiplier	: 1		



Data File Name	: C:\HPCHEM\1\DATA\940419\055R0101.D		
Operator	: jll	Page Number	: 1
Instrument	: GC3	Vial Number	: 55
Sample Name	: 94-061-4/5 5.1g	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 1
Acquired on	: 19 Apr 94 02:42 PM	Instrument Method	: GASOLINE.MTH
Report Created on	: 19 Apr 94 03:44 PM	Analysis Method	: GASBTEX.MTH
Last Recalib on	: 18 JAN 93 04:31 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:



Data File Name	: C:\HPCHEM\1\DATA\940419\006F0101.D	Page Number	: 1
Operator	: jll	Vial Number	: 6
Instrument	: GC3	Injection Number	: 1
Sample Name	: 04-061-9/10/11	Sequence Line	: 1
Run Time Bar Code	:	Instrument Method	: GASOLINE.MTH
Acquired on	: 19 Apr 94 04:02 PM	Analysis Method	: GASOLINE.MTH
Report Created on	: 19 Apr 94 05:03 PM	Sample Amount	: 0
Last Recalib on	: 20 JAN 93 10:31 AM	ISTD Amount	:
Multiplier	: 1		





NATIONAL
ENVIRONMENTAL
TESTING, INC.

American

CHAIN OF CUSTODY RECORD

COMPANY O. Sullivan Omega, Inc.
ADDRESS 3214 10th Ave SW Seattle, Wa
PHONE 206-632-2240 FAX _____
PROJECT NAME/LOCATION Kainer Gold Course
PROJECT NUMBER 2634-008
PROJECT MANAGER J.T. Willie

REPORT TO: J.T. Willie
INVOICE TO: P. Riley
P.O. NO. _____
NET QUOTE NO. _____

SAMPLED BY J.T. Willie

(PRINT NAME)

SIGNATURE

(PRINT NAME)

SIGNATURE

ANALYSES

DATE	TIME	SAMPLE ID/DESCRIPTION	GRAB	COMP	# OF CONTAINERS TYPE	MATRIX	PRESERVED Y/N	WTPH-D	WTPH-B	WHC/D	COMMENTS
4/15/94		RGC - T1-1	X		1	Soil	Y	X			
		-T1-2	X		1				X		
		-T1-3	X		1				X		
		-T2-1	X		1			X			< Composite together >
		-T2-2	X		1			X			
		-T2-3	X		1			X			
		-T2-6	X		1			X			
		-T2-7	X		1			X			
		-T3-1	X		1			X			< Composite together >
		-T3-2	X		1			X			
		-T3-3	X		1			X			
		-T3-4	X		1			X			
		-T3-5	X		1			X			

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO
FIELD FILTERED? YES / NO

COC SEALS PRESENT AND INTACT? YES / NO
VOLATILES FREE OF HEADSPACE? YES / NO

TEMPERATURE UPON RECEIPT: _____

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA _____
I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS J.T. Willie DATE 4/15/94

RELINQUISHED BY:

DATE/TIME

RECEIVED BY:

RELINQUISHED BY:

DATE/TIME

RECEIVED FOR NET BY:

METHOD OF SHIPMENT

REMARKS:



CHAIN OF CUSTODY

A chain of custody is one of the first steps in sample control in the laboratory. The chain of custody is a "contract" between the client and the laboratory to insure that all information from the client is transmitted to the laboratory in an ordered fashion.

Procedure

A A three copy chain of custody shall be used. A ball-point pen, either blue or black shall be used, pressing hard to make all three copies.

B Writing legibly, or printing fill out the chain of custody as follows:

- 1 Name of Company X
Address of Company
Phone and Fax Number
- 2 Project Name/Location
Project Number
Project Manager
- 3 Report To
Name and Address, if different from above (enter in remark section)
- 4 Invoice to
Name and Address, if different from above (enter in remark section)
- 5 Purchase Order Number and NET Quote Number (if applicable)
- 6 Sample Information
Date and Time
Sample ID/Description
Grab or Comp
of Containers/Type
Matrix
Preserved - Y/N
- 7 Parameters to be tested on samples
Check parameter squares with sample descriptions
- 8 Comments
Special Methods and Detection Limits
Known Sample Contamination
- 9 Sample Disposal Instructions

THE WORK WILL BE UNDERTAKEN IN ACCORDANCE WITH NET'S STANDARD TERMS AND CONDITIONS, WHICH INCLUDE THE REQUIREMENT THAT PAYMENT IS DUE WITHIN THIRTY (30) DAYS FROM THE DATE OF INVOICE.